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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,402	12/31/2003	Paul T. Van Gompel	19,577	8997

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KIMBERLY-CLARK WORLDWIDE, INC.  
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EXAMINER

CHAPMAN, GINGER T

ART UNIT PAPER NUMBER

3761

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/750,402	<b>Applicant(s)</b> VAN GOMPEL ET AL.	
	<b>Examiner</b> Ginger T. Chapman	<b>Art Unit</b> 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 34-45 and 47-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-45 and 47-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/16/05 &amp; 9/21/05</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Status of the Claims***

Claims 34-45 and 47-51 are pending in the application.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 34, 35, 38, 39, 40-45, 47 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roe et al (US 6,482,191) in view of Kling ('086) and further in view of Huffman (US 4,935,021).

Claims 34, 41-43 and 45: As depicted in Figure 2, Roe et al disclose a disposable absorbent garment (20), the disposable absorbent garment comprising: an outer layer (26); an elastic inner layer (24), wherein the elastic inner layer has an elastic inner layer perimeter and wherein the elastic inner layer defines an opening (60) located in an internal position to the elastic inner layer perimeter. Roe discloses the elastic inner layer is elastic in both a longitudinal and lateral direction of the absorbent garment (col. 2, ll. 46-47) and can include two or more layers of materials (col. 8, ll. 37-40).

Claims 34, 40, 47 and 51: Bonding the elastic inner layer perimeter and the absorbent assembly to the outer layer is well known in the diaper art. Roe et al, at column 4, line 3, incorporating by reference the teachings of Allen et al cited in Office actions mail dates 3 November 2004 and 22 February 2005, discloses the elastic inner layer perimeter is bonded to the pleated outer layer and the absorbent assembly is attached to the outer layer along a lateral centerline of the absorbent assembly with a plurality of adhesive bonds and thus Roe discloses

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the inner layer bonded to the pleated outer layer and the absorbent assembly attached to the outer layer (see Office action 3 November 2004).

With regard to claim 34: Roe does not expressly disclose the absorbent assembly top sheet layer. As seen in Figure 2, Kling teaches diaper having an elastic inner layer (2) defining an opening (17), an outer layer (5) and an absorbent assembly (4) having a topsheet layer (3). Kling states that the benefit of making an absorbent assembly with this design is that when the diaper elastic inner layer (2) defines an opening the absorbent assembly topsheet layer (3) prevents skin irritation by preventing the skin of the user from coming into contact with the absorbent assembly (4) by enclosing the absorbent assembly between the topsheet (3) and the bottom layer (column 2, lines 54-57) thus expressing the desire for an absorbent assembly having a topsheet layer that prevents skin irritation and thereby providing the motivation for a worker of routine skill in the art to form an absorbent assembly having a topsheet layer. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the absorbent assembly of Roe having a topsheet layer as taught by Kling thereby providing a diaper that prevents skin irritation.

With regard to claims 34, 38 and 39: The combination of Roe and Kling discloses the outer layer which is liquid impermeable as recited in the instant **claim 38** but does not expressly disclose the absorbent assembly barrier layer. Huffman, at column 2, lines 48-54 expresses the desire for an absorbent assembly (14) having a fluid impervious barrier layer (28) as recited in the instant **claim 34** underlying the absorbent assembly (14) such that the outer layer (16) of the diaper is liquid permeable as recited in the instant **claim 39** (col. 6, ll. 43-44) thereby enhancing the breathability of the diaper (col. 2, lines 37-45) thus improving comfort for the wearer (col. 6,

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ll. 48-49) while attaining the desired liquid retention and thus reducing diaper rash and reducing leakage thus providing the motivation to do so in the combination of Roe and Kling. Therefore, to form the absorbent assembly of Roe and Kling having a barrier layer underneath the absorbent assembly as taught by Huffman in order to provide a diaper having enhanced breathability thereby reducing diaper rash and reducing leakage from the absorbent assembly would have been obvious to one having ordinary skill in the art at the time the invention was made.

Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Roe and Kling and Huffman as applied to claim 34 above and further in view of Repke et al (US 4,205,679).

Claims 36 and 37: Roe as modified by Kling and Huffman is silent on the outer layer. Repke teaches a diaper having stretchable inner and outer layers. In particular, Repke teaches an outer layer that is elastic (col. 5, ll.27) and has one or more pleats (col. 4, ll. 44) and is extensible (col. 4, ll. 45). Repke states that the advantage of making an outer layer with this design is to give enhanced stretch and extensibility characteristics (col. 2, ll. 33) thus providing good conformability and fit to the body of the wearer without bulkiness (col. 2, ll. 19-20) particularly in the leg and waist area thereby preventing the problem of liquid strike-through and leakage thereby providing the motivation and desirability of such. In view of the teachings of Repke, to form the outer layer of Roe, Kling and Huffman having elastic and extensibility characteristics in order to provide a diaper with enhanced fit and reduced leakage would have been obvious to one of ordinary skill in the art at the time the invention was made since Repke states at column 2, ll. 24 to 33 that such a modification enhances the fit of the diaper and prevents liquid strike-through.

Claim 44: Roe does not expressly disclose the inner layer is liquid impermeable. Kling teaches the ability of an elastic inner layer to conform closely to the body of the wearer (col. 1, ll. 10-11) while allowing urine to pass through the opening in the impermeable material (col. 8, ll. 44-47) thus expressing the desire for an elastic inner layer that allows urine to pass through to the underlying absorbent assembly. In particular, Kling teaches that when the inner layer defines an opening the inner layer can be liquid impermeable (col. 8, ll. 44-47) and the opening allows urine to pass through the elastic inner layer to the topsheet layer of the absorbent assembly and thereafter be absorbed by the underlying absorbent assembly. It would therefore be obvious to one of ordinary skill in the art to form the inner layer of Roe of impermeable material as taught by Kling in order to provide a flexible inner layer that conforms to the body of the wearer while allowing urine to pass through to the underlying absorbent assembly.

Claims 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Roe, Kling and Huffman as applied to claim 34 above and further in view of Freeland (US 5,269,775).

Claims 48 and 49: Roe as modified by Kling and Huffman discloses the garment but does not expressly disclose the outer layer length and width greater than the inner layer length and width. Freeland, at column 1, ll. 50-51 teaches the ability of the elasticized inner layer to provide a close fit that is more comfortable to the wearer and thus expresses the desire for an elasticized inner layer that conforms to the anatomy of the wearer. Freeland teaches the diaper having an outer layer length and width greater than the inner layer length and width (col. 4, ll. 60 68 to col. 5, ll. 1-5). In view of the teachings of Freeland, it would therefore have been obvious to one having ordinary skill in the art at the time the invention was made to form the diaper of

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Roe having an outer layer length and width greater than the inner layer length and width, since Freeland states at column 2, ll. 9-15 that such a modification provides a diaper that conforms to the wearer's anatomy thus providing a comfortable diaper for the wearer.

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Roe, Kling and Huffman as applied to claim 34 above and further in view of McCormack (US 5,997,981).

Claim 50: Roe as modified by Kling and Huffman is silent as to the range of percent bonded area to unbonded area. McCormack, at column 1, ll. 56-60, expresses the desire for an inexpensive outer layer useful as the loop component for nonpermanent fastening of the garment about the body of the wearer such that the garment can be separated when subjected to a desired level of peel force without separating the laminated layers. McCormack further teaches, at column 3, ll. 62-67 and col. 4, ll. 13-17, that it is known in the diaper art that typically the useful percent bonded area varies from around 10% to around 30% of the area of the laminate and that it is well known in the diaper art that such bonding holds the laminate layers together and imparts integrity to each individual layer. In view of these known teachings to bond the inner and outer layers of Roe with a percentage of bonded area to unbonded area of from 10 to 40 as taught by McCormack would have been obvious to one having ordinary skill in the art at the time the invention was made in order to meet the requirements of peel strength and refastenability, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges of result effective variables in known processes is within the skill of a routine worker in the art.

***Response to Arguments***

Applicant's arguments filed 2 December 2005 have been fully considered but they are not persuasive.

Applicant argues that the elastic inner layer of claim 34 may be either liquid impermeable or liquid permeable while the inner layer of claim 44 is liquid impermeable and examiner has improperly imparted the limitation of liquid impermeability from claim 44 into claim 34 (remarks, p. 1). This argument is moot because the limitation "liquid impermeable" does not appear in claim 34 and therefore the limitation of permeability was not addressed in examination of claim 34.

Applicant argues that Roe does not disclose the elastic inner layer is elastic in both the longitudinal and lateral directions (remarks, p. 2). This argument is not persuasive because Roe states at column 3, lines 61-62 that the elastic inner layer may be fully elasticated and at col. 6, l. 49 that the longitudinal extension of the inner layer in use varies based on the body dimension of the wearer, and at col. 7, l. 57 "stored elastic energy distribution in the lateral direction" and at col. 6, ll. 42-44, "the tensile loading locates the slit opening 60 against the skin near the wearer's anus and maintains longitudinal and lateral alignment...", thus clearly disclosing longitudinal and lateral elasticity.

Applicant argues that preventing skin irritation, reducing diaper rash, reducing leakage and enhancing fit of the diaper are not motivations to combine but are objectives of most absorbent articles (remarks, p. 5).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the



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teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, suggestion to enhance the fit of the diaper and reduce leakage is generally available to one of ordinary skill in the diaper art; further, all cited references are directed to improvements in the inner layer of diapers.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, all cited references are directed to improvements in the inner layer of diapers.

In response to Applicants' argument that McCormack is discussing the bonding area of the outercover laminate not the bonding area between the elastic inner layer and outer layer as required by claim 50 (remarks, p. 7), examiner is not relying on McCormack for teaching bonding inner and outer layers or outercover laminates, examiner is relying on McCormack for the teaching that the percentage of bonded area to unbonded area is a result effective variable in the known process of meeting the requirements of peel strength and refastenability for a particular article and its intended use. It has been held that where the general conditions of a

claim are disclosed in the prior art, discovering an optimum value of a result effective variable in a known process is within the skill of a routine worker in the art. *In re Boesch and Slaney*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ginger T. Chapman whose telephone number is (571) 272-4934. The examiner can normally be reached on Monday through Friday 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ginger Chapman  
Examiner, Art Unit 3761  
02/23/06

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**TATYANA ZHUKAIEVA**  
**SUPERVISORY PRIMARY EXAMINER**

